



ABOUT PTC

Pacific Trinetics Corp. (PTC) has been dedicated to providing innovative, state of the art equipment and manufacturing systems for the electronics industry since 1987.

A US company, globally renowned for its equipment quality and longevity in the micro-ceramic industry, PTC has a footprint in multilayer ceramic components (MLCC) and multi-chip modules (MCM) industries including High and Low-Temperature Co-fired Ceramics (HTCC & LTCC) and solid-state batteries.

Pacific Trinetics' factory automation division builds on years of experience, partnering with industry leaders to streamline and automate production facilities towards becoming smart factories. PTC's expertise in automation, IoT and Big Data analysis has helped companies excel in Industry 4.0.

CONTACT INFORMATION

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PTC STACKER



SA06001



MS10001



KEY FEATURES

OVERVIEW

- Automatic mylar remover for thick and thin tapes
- Automatic Load/Unload for up to 10 types of tapes
- Automatic vision alignment

SOFTWARE

- PTC Specific state of the art user interface
- Universal data communication

PTC CUTTING-EDGE

- Tape rotation and flipping mechanism
- Worldwide technical support
- High-pressure hydraulic press (Up to 420 kN)

OPTIONS

Automatic Load / Unload Mechanism

Automatic Mylar Remover

Tape flipping mechanism

Vision alignment system

Multiple tape type stack

MODELS

PTC LTCC Ceramic Stacking System

ST06001 (Up to 6" Tape)

ST08001 (Up to 8" Tape)

PTC MLCC Ceramic Stacking System

SA06001 (Up to 6" Tape)

MS08002 (Up to 8" Tape)

MS10001 (Up to 10" Tape)

SPECIFICATIONS

Stack Thickness Up to 500 layers or 20 mm

Sheet Size Up to 10" Tape

Tacking Pressure Up to 420 kN

Tacking Temperature Up to 85 °C

Cycle Time 15 s Layer to layer

Vision Alignment Dual camera to the servo system

Stacking Accuracy Up to ± 0.01 mm

Rotation 0 - 360 Degrees

Tape Flipping 80 Degrees

Mylar Removing Manual or Automatic

PTC's Semi-Automatic Stack and Tack System is engineered and built to meet the demanding requirements for the assembly of today's multilayer ceramic components. Its proprietary software and vision alignment system ensure stacking accuracy of $\pm 10 \mu$ with maximum stacking thickness of 0.4". The touch screen recipe-driven monitor allows the operator to have full control over tacking temperature and cycle time. The green tape is placed onto the Loading Stage. The stacker is equipped with an optional automatic loading mechanism with the number of cartridges specified by the customer.

PTC STACKER

The automatic loading mechanism also features a Mylar remover, which removes the Mylar without any interference to the ceramic sheet and places the sheet at the vacuum stage for automatic vision alignment for precise layer-to-layer placement. High-speed robotic actuators combined with vacuum technology ensure a fast and smooth operation of the loading mechanism.

Fully configurable sequencing of robotic arm picks up from cartridges by touch screen HMI enables the user to place any number of sheets in any of the cartridges with ease. Higher safety mechanisms are also accomplished by additional measures such as static eliminators, raster switches, and other cutting edge technologies.